

## ABSTRACT:

The invention relates to a receiver which forms part of a communication system and receives data frames through a communication channel which is subject to disturbances, said receiver carrying out an estimation of the maximum error rate and minimum error rate caused by the communication channel. The receiver in a first time period verifies the validity of the received data frames so as to detect and identify the received erroneous data frames and the received correct data frames. Subsequently, the receiver proceeds to correct those received erroneous data frames which can be corrected, so as to generate corrected data frames. The erroneous bits are detected through a bit-by-bit comparison of the erroneous data frames 302 and the corresponding corrected data frames 303, which are added together and then averaged over the total number of bits  $nb\_total\_bits$  received by the receiver so as to obtain a minimum error rate for the transmission. The invention also enables an estimation of a maximum value for the error rate of the received data by adding together the number of bits contained in those data frames 301 which cannot be corrected.

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Application: estimating error rates in a communication channel.

Ref: Fig. 3